THE WESTERN FARMER AND GARDENER:

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

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Portrait of Rover.

The frontispiece to this No is a portrait of the short horn Durham bull, Rover, the property of Richard Pindell, Esq. of Lexington, Kentucky. Press of matter and other circumstances compel us to postpone his pedigree, &c. till a future number.

BOURBON COUNTY, (near Centreville, Ky.) Dec. 5, 1841.

DEAR SIR:—The person who recommends patent machinery or implements of any kind, particularly, patent agricultural implements, is sure to meet the sneer of contempt from a large body of those interested in the success of agriculture; and it is not surprising, because there are at this time more worthless inventions pressed upon the farming community, than there are useful ones, and the farmer who invests his money in that way, five times out of ten, has his reasonable expectations disappointed, and finds that he has lost both time and money. There are, however, new implements offered to the farmer, of value, and no one should be deterred from making use of such known to the community, by an apprehension that others may not appreciate his suggestion.

Upon this principle, then, at your suggestion, I communicate for the pages of the Farmer and Gardener, the result of my experience in reference to Batchelder's Corn Planter.

My last crop, ninety acres, was planted with it, and as the crop is matured, I can speak of it with less danger of error than if I had not taken the crop through the whole course of cultivation.

Its advantages, I conceive, are as follows:

1. With it one man and one horse, the ground being properly prepared, can plant eight acres per day, dropping the grain and covering it very well,

2. It drops from three to six grains in a place, at any required distance from two to five feet apart, and may be so constructed as to drop a different number of grains at a shorter or greater distance if desired.

3. It is of light draught, and can be carried with a single horse.

4. It will cover the seed at any depth from one to four inches, remove all the clods from the hill, and presses the soil to the seed, by a roller which is attached and follows in the rear.

5. The corn shoots, when up, are not in the bottom of a furrow, as in the common mode of planting, but are upon a level with the surface, and on this account can be cultivated when they first show themselves, and are in no danger of being washed away by heavy rains.

These I conceive to be so many reasons in favor of the utility of the machine; but there are, however, some apparent objections to its use, which I will state:

1. The rows can be cultivated but one way, and this mode of planting is in fact a process of drilling.

2. The laborer cannot make straight rows without other aid than that he derives from his knowledge as a good ploughman.

3. The ground must be deeply ploughed and the soil well pulverized, for in cloddy or indifferently ploughed land, the machine cannot operate to advantage.

4. If the soil be mixed with stubble, and has an excess of moisture, however slight the latter may be, the point of the share becomes obstructed with the stubble, and nothing can be done.

These objections are, I think, only apparent, and can be easily overcome.

I believe that drilling is the best mode of planting corn, and if it is, that difficulty is obviated.

To obtain straight rows, let the field be laid off one way with the plough, at any required distance, and run the planter between these rows. This ensures a straight row, facilitates after cultivation, and in heavy rains throws the wash from the corn. The other two objections are met at once by deep ploughing, thoroughly pulverizing the soil, and by planting only when the soil is not too wet, things which the farmer is sure to do, if he expects a good crop.

The planter presents one advantage which appertains particularly to the farmer who cultivates hemp. The circumstance that he can plant his corn with one hand and one horse, enables him to sow his hemp at the same time, and thus he can commence the cultivation of his corn crop as soon as it appears above the ground.

Upon the whole, the trial I have made will cause me to use the planter hereafter. I am satisfied I ought to do so, and I believe that others who will make a similar trial will come to a similar conclusion.

Considering the character of the last season, which was in some respects unfavorable to the cultivation of corn, my crop is I think, a good one. The average being about fifty bushels to the acre. I measured one acre, in one of my fields, accurately and the yield was fifty-eight bushels, five gallon and two quarts.

Very respectfully, &c.

GEO. W. WILLIAMS,

Report of a Committee

Appointed to present their views, relative to forming a new State Agricultural Society, in Ohio, to take the place of the one that expired by limitation on the 20th Oct. last.

The Committee appointed to present to the Society their views relative to the formation of a new State Agricultural Society, beg leave to make the following report:

Your committee, being fully impressed with the belief that the exertion of the Society, that has, by limitation, just expired, brief as it was, has been highly beneficial to the country, inasmuch as its tendency has been to keep alive that laudable emulation (first incited by the importation of English cattle) among its members, each to excel the other, in having the best stock, and at the same time affording them an opportunity for a mutual interchange of opinions and facts, of experiments and improvements, in relation to the best breed of farm stock, as well as other matters: nor have its benefits stopped here, for through the influence of it and kindred societies there has sprung up an enterprising spirit of improvement in their stock among the farmers generally, throughout the whole West, that bids fair at no distant day, if the past encouragement be continued, to annihilate the scrub, or native, breed of the country. If then such results, results in which we are all vitally interested, are by a proper encouragement attainable, your committee are fully of the opinion that we should not only continue our assistance, but continue it on an extended scale, so as to include hogs, cattle, horses, the raising of grains, and improvements in farming and implements of husbandry, of every kind. History informs us that in all countries, in which societies of the like kind have been maintained for a length of time, with a becoming spirit, have derived great, important, and we might almost add incalculable advantages therefrom. Therefore, under this impression we would recommend the immediate formation of a new society, with the style or title of the old one.

Your committee consider that in laying down a basis for the formation of a State Agricultural Society they should confine the objects of the Society to the demands and business of the country. The Scioto Valley, in which we live, is, strictly speaking, an agricultural grain growing country. On one side of it it is bounded by a country adapted to the smaller grains, such as wheat, and excelled by no other, for that purpose; whilst on the other side there is a grazing region, seldom equaled in extent or quality, whilst between the two there is a corn region, vieing with the universe. These three sections come under the general title of "Scioto Valley." What then should be the objects of an Agricultural Society adapted to such a country? If we confine ourselves to the corn region we do injustice to the other sections. Your committee think an Agricultural Society may be formed giving a proportionate encouragement to each of these three grand divisions. We will now speak of each of these divisions in detail, and offer what we consider the encouragement they require.

1st, then, of the wheat region. This section of country is a limestone region, a mineral region. Now vegetation derives its nourishment from the mineral division of nature generally. Hence the necessity of pulverizing the soil, so that vegetables can more easily derive their nourishment from it. Vegetables being composed principally of carbon and water, and as the decay of vegetable matter is a chemical process, it follows, that that decay, by returning its carbon to the soil from which it grew, constitutes the best soil for the continuation of the species of vegetables. Now in growing the small grains, the vegetable matter is necessarily severed from the soil, thus depriving it of one of its best means of becoming enriched. Continued cropping exhausts the soil without remuneration. Encouragement should therefore be offered for the best means of preventing this exhaustion of land by cropping, and also of soiling lands already exhausted. Your committee would therefore recommend the appointment of a committee to receive essays on these subjects, and award premiums to such as they may deem worthy; no plan to be considered worthy of a premium, unless it has borne the test of experience. As pulverization of the soil is essentially necessary for the growth of small grains, your committee would also recommend that premiums be awarded to any implement of husbandry calculated to save time and labor, in accomplishing that object, such as improvements in ploughs, harrows, or any other implement of husbandry.

Your committee also recommend that a premium (an ample premium) be awarded to the best crop of wheat per acre, annually at their fairs, the mode of culture, the implements used, and the time and expense occupied with the crop being always given.

2nd. The Corn Region.—This Region comprises the alluvial deposite of the Scioto and its tributaries, also a description of land called in common parlance "The Plains," such as Walnut and Pickaway Plains. These are entirely different, but produce in a state of nature equally well. The one feeds the corn with the fat deposite created by the streams in a swollen state, and which has been collecting since time began, whilst the other, (the plain land,) a rich limestone gravel land, and feeds the corn by the continual deliquescence and decomposition of the limestone. This latter soil will not bear cropping so long as the alluvion. The mode of culture is the same in each as practiced in this country. There is no crop which is more essential to the wants of humanity than that of corn. Hence, reasoning (a priori) arises the im-

portance of the inquiry what improvement can be made in its culture? Can we, by a different mode than that practiced at present in this valley, increase the quantity per acre, or lessen the labor of culture? Do we not need some improvement in the utensils used in its cultivation by what is the best manner of choosing seed and planting it. With a view of ascertaining a matter so important to our interest, your committee would invite mechanism to exercise its ingenuity in devising an improvement in the implements used in the cultivation of corn, and award premiums for such improvements, if in the the estimation of a committee appointed for that purpose, they deserve them; they would also recommend that each member of this Society, living in this Corn Region, should report annually to the Society their mode of culture (if differing from that usually adopted) with the product per acre, and also that a premium be awarded for the best crop of corn, consisting of a given number of acres, the report being accompanied with the mode of culture, the choice of seed, and the expense per acre for its cultivation.

In connexion with the subject of Corn, necessarily arises that of rearing and fattening Hogs. It is the interest of all farmers to have that stock of hogs which will yield the most with the same amount of feed. This does not mean only the feeding of grains, but that hog also that will graze and improve on grass in the greatest ratio. It is not the largest hog that is most desirable for a farmer, but that one which with summer grazing and the subsequent feeding of corn, will yield the most according to the quantity of grain fed. Another very important matter is the quality of the animal. We want a hog that by feeding will make the most improvement in the finest points; we do not want a coarse grained, ragged animal, but one that is neat, and at the same time well fleshed. This description of animal your committee believe will be found in the greatest perfection in the Berkshire hog: we believe that in grazing properties, in aptitnde to fatten, in the taking of flesh in the points most desirable, and especially the ham, they excel every other hog with which we are acquainted. We would therefore recommend that ample encouragement be given to the improvement of hogs. We believe that three premiums should be awarded to each class of hogs, and that the premiums be of such a size as to encourage their improvement.

With regard to the third grand division of the Scioto Valley (according to our arrangement) much might be said. This section of country was once called the Barrens, from the stinted appearance of the timber in the first settlement of the country, but is now found to be as fertile as almost any other part of Ohio. It is a soil composed in a great measure of loam based on clay. This basis of clay necessarily retains a great deal of moisture near the surface of the earth; hence this country is a grass country, from the fact that grasses generally require a great deal of moisture. The natural grasses of this section of country have given way to the artificial or foreign grasses; hence there is no necessity for any encouragement in attempts to improve the natural produce of the country by the further introduction of foreign grasses; we find also, that as this region is improved by cultivation its aptitude for the raising of grains is increased; and your committee believe that were it the interest of the farmers of that section, it might become in a few years a corn growing country; but at present, and for a long time to come, it will be a grass region, and must be treated as such. In immediate connexion, then, with the subject of grasses, is that of Cattle; and here we shall necessarily be as brief as possible. We shall introduce briefly the three descriptions of cattle most valued in this country, viz: the Devons Herefords and Durhams. The qualities of the Devon cattle may be referred to three points, working, fattening and milking. As working cattle perhaps the Devon excel any other cattle, having a quickness which no other breed possess. Their fattening properties are very superior. but agreeably to Youatt, a writer on English cattle, they will not fatten at as early an age as some other breeds, but after having been worked as oxen until they are six years old, they will then fatten as much with the same amount of food, in a given time, as any other cattle. The same author states, that for the dairy they are inferior to other cattle. The milk is good, and yields more than an average quantity of cream and butter, but is deficient in quantity. The objections then, in this country, to the Devonshire cattle, are, late maturity and inferior milking propensities; their superiority as workers not compensating for these deficiencies.

The Hereford cattle are much larger than the Devons, and will fatten to a much greater weight. They are not so well adapted for work as the Devon cattle, and are poorer milkers than the Devon. To compensate for these deficiencies, however, the Hereford cattle will fatten at an early age, and according to the author quoted above, they are advantageously marketed at three years old, consequently better adapted to this country than the Devon cattle.

Next in order is the short horned breed, or the improved short horn, as they are now called. This breed of cattle is so well known to this Society that it almost seems a matter of supererrogation to introduce them, but we hope you will excuse your committee whilst they give their opinion in comparison with the other breeds previously mentioned. The short horned cattle were originally only celebrated for their milking properties; when put to fatten they were also feeders; but by the improvement, by judicious crossing,

made by Mr. Collins and others, their aptitude to fatten was much improved, and that at a very early age. "Indeed," says Youatt, "early maturity is the grand and elevating characteristic of the short horns, and their capacity to continue growing, and at the same time attaining an unexampled ripeness of condition at an early age, has excited the wonder, and obtained the approbation of every looker on not blinded by prejudice." Whilst, however, this improvement was making in the maturity and the fattening properties of the animal, the milking quality deteriorated in a considerable degree, still, agreeably to Youatt, although the quantity of milk was diminished the quality was much increased, and as much butter per week was made from the improved as the unimproved breeds, although the milking properties of the latter were considered unrivalled. The short horn cattle attain a much greater weight than either the Devon or Herefords. The excellencies of the short horn cattle consist then in early maturity, aptitude to fatten, and milking properties equal to Devon, and superior to the Herefords. Those are the properties which the grazier desires also in rearing cattle. Your committee are then of the opinion that the short horn cattle are decidedly superior to any other cattle with which we are acquainted for the grazing region of Scioto Valley. Judicious crossing of the short horn breed with the native cattle improves the produce of the native breed; and in this way your committee believe the native breed will be eventually exterminated.

Your committee would therefore recommend, that the introduction, extension, and improvement of short horn cattle be encouraged by all possible means; we recommend premiums for the different ages in a manner similar to that heretofore adopted by the Society.

Your committee also believe that a premium should be offered for the best working pair of cattle to be tested by trial of work.

Horses, in the opinion of your committee, should be included in the objects of the Society; the description of horses will be left to the Society.

With regard to Horses, your committee are of the opinion that encouragement should be offered to draft horses. We would therefore recommend that encouragement be offered to draft horses not under 16½ hands high.

In conclusion your committee would recommend that their proceedings be published annually in some agricultural paper, and would recommend the Farmer and Gardener an agricultural paper, published in Cincinnati, by C. Foster, and edited by Mr. Affleck, as the organ of the Society.

We further recommend that a committee be appointed annually to draft an address to the People of Ohio, setting forth in detail the benefits resulting to the country generally by the maintenance of agricultural societies with spirit, and appealing to the People, not only to the farmers but to the enterprising of all classes, to aid us in a cause in which not only ourselves but the whole country will eventually be immensely benefitted.

All which is respectfully submitted, and your committee ask leave to be discharged.

P. K. HULL
WM. RENICK, Sr.
WM. RENCIK, Jr.
G. RENICK, Sr.

Common School Laws—Science and Agriculture.

A society recently formed, called "The American Society for the promotion of General Education," has published a plan for a school law, as their views of what should be adopted in every State. We are glad to see that the science of agriculture is not forgotten, as it is probable, from the number and respectability of the persons engaged, and the vigor with which they take hold of the work that something will be accomplished.

It is proposed that the business of teaching should be a profession, "having all the characteristics common to the others;" and in the next place to make each school district more independent and permanent than they now are, having necessary corporate powers to hire a *permanent* teacher, buy apparatus, &c.

It is proposed that the large and populous districts be induced to employ professional teachers, and that "a variety of branches be taught, such as are essential to a full English academic course, not excepting the application of science to agriculture and horticulture:— acres of land to be attached to the institution, together with library and apparatus: at least two courses of lectures to be given annually, in some of the sciences, to adults as well as youth."

There are defects in all kinds of schools, which do not seem to diminish from year to year. To remedy this we need more well qualified professional teachers, who have been trained and bred to their business. It is not enough that they be learned; they must themselves be *educated*, in the more extensive sense of that term, and be qualified to communicate what they know to others, in the best manner, not neglecting *mental, moral, and physical* culture.

If this profession can be created, and teachers can be required to teach the sciences connected with agriculture in academic institutions, or higher common schools, that would spring up all over the country, under a suitable general law, it will be an important epoch in the history of agriculture.

The following remarks are appended to the plan, and afford matter for reflection:

It will be observed that this society *means just what it says*, in asking, with most educators, that "Teaching should be a profession, and schools permanent." It is thought

that most educational writers must come to a plan of this kind, to be consistent with themselves. The laws are now arrayed against their principles and objects, especially in forbidding the profession and permanence of schools.

The Common School Teachers do not, as a class, ask this change. They never meet nor act in concert. Not one in fifty think of making it a business. Professors in Colleges and Teachers in private institutions do not, for themselves, need nor ask the change. The people need it—the best interests of education, and of our country require it. From the neglect of an important part of the theory of our government, from a carelessness as to the character of instruction given and teachers employed, an alarming apathy has grown upon us. Our country needs more than schools and school houses. It needs good instruction and mental and moral culture: and how can this be had without qualified teachers, trained and bred to their profession?

The friends of reform cannot expect to have everything accomplished at once. In the first place, if only the permanence of schools can be obtained, it will be important. Then if some of the worst features can be removed from the business of common school teaching—if it can only be made as desirable for men to pursue as the various mechanic arts, this alone will repay great efforts. We need carpenters, and bricklayers and shoemakers, and we require that they should be competent and thorough mechanics— and it certainly would be desirable to have teachers who *learn* and pursue their calling as their only business.

Mr. John L. Talbott, of this city, is corresponding secretary, and Dr. O. Sheldon Leavitt, of Covington, Ky. is appointed general agent, to visit different States, to present the subject to the people and the legislatures.

Dr. L. is a very ardent advocate of the cause, and from repeated interviews with him we are very confident that the cause of agriculture, as well as other interests, &c. will be materially advanced by proper legislative action on this all important subject.

Llangolen, Sept. 27th, 1841.

To Thos. Affleck, Esq.

Dear Sir,—We shall never arrive at just conclusions on many subjects intimately connected with agriculture until rational experiments shall have been made by competent persons. For instance, in regard to the feeding and fattening of animals, the most effectual and economical modes must depend on experiments, which, to be of real practical value, must regard all the conditions of the organism, instincts and habits of the animals, and the elements of the substances on which they feed. We perceive then at the outset the advantages to be derived from *the knowledge of animal physiology and chemistry.* Such experiments could not be conducted with any hopes of success without it. The different size of the stomach alone in different kinds of animals not only indicates the adaptation of that organ to the reception of different masses of food, but to different conditions of assimilation, and to different proportions at least in the elements which constitute the substances on which they feed. There is not a greater difference in the relative size of the stomach of the lion and the ox, or the dog and the sheep than there is in the constitution of their food, the mode of alimentary manipulation or the habits of these animals. In their natural states they are obedient to their instincts, intimately connected with and indicated by their organization. In this they rarely err. *They* neither disturb nor counteract the adaptations of their Creator. But when *we* become their masters and control their instincts, if we are unacquainted with their physical systems, or disregard the conditions indicated by them, or if we have not ascertained the elements and proportions of them in their food, and if we have not closely observed their habits, *we* are liable to the commission of great errors.

We cannot without much knowledge apply the means which we possess of making animals administer to our wants in the most economical manner and in the highest degree of which they are susceptible. To do this, we must become intimately acquainted with their na-

tures and with the nature of the substances which they require. We must recollect that domesticated animals cease in some degree to exercise their instincts when they depend on the care of man. And when reason assumes the rights of instinct, that is, when the mind of man directs and governs that which the mind of God directed before, it should bring to the task all the knowledge necessary to supply the place of instinct. In the choice, apportionment and changes of food then, the best results are only to be expected from the most accurate knowledge judiciously applied.

If we observe the ruminating animals, we find them feeding exclusively on vegetables—roaming at large—selecting certain herbs in preference to others, and frequenting salt licks. They increase and multiply, and as the vegetables on which they feed, mature and ripen their seeds, they grow fat. Now, if we ascertain the bulks or masses which they eat in a given time, we have an unerring guide for reason in taking the place of instinct *as to quantity*, when we allot to them their food. This is one important condition necessary to be observed. Not less important, but more difficult it is to ascertain the elementary substance in the mass of their food, and the proportions in which they diet in it, when they only live in thriving condition, and when they fatten rapidly. The amounts and proportions of the elements in these two cases will be found to differ. On that difference depends all our methods of feeding and fattening rationally, and our ability not only of substituting one kind of food for another, or of mixing various substances for their food successfully, but of economizing by using those cheapest substances which contain tne necessary elements. When they fatten rapidly, too, we cannot ascertain whether the process is savingly or wastefully carried on without an analysis of the dung. There may be used much valuable matter which passes unassimilated, when a cheaper substance might supply its place with equally beneficial results. *Chemistry* alone can accomplish these useful purposes. But after the facts and principles are established, every body can use and apply them. It is true that we can raise and fatten animals without this knowledge, by permitting to them the partial use of their instincts and by supplying them most lavishly with food known to be agreeable to them. But there is in this a most embarrassing waste in the elements of nutrition.

The corn that is fed away to beef cattle in the west is sufficient, with substances much less valuable, to fatten at least *one-third* more. If the nutritive matter in the corn were diffused through a sufficient mass it would not be wasted by passing unassimilated. Water and fire can be substituted for grain to a very large amount. They may not only be used to give the proper mass but to unite with other substances rendering them capable of complete assimilation, and the former adding much to the elements of nutrition. An ox or hog, it is believed, will extract or assimilate more nutritive matter from one quart of grain ground into meal and boiled thoroughly in water enough to convert it into thin mush, than from three pints of the grain unground and raw. The greater part of the grain consists of globules of starch (amylin.) The boiling in water bursts the coating of them, and the fine nutritive jelly (dextrine) combines with the water and is all digested. When the grain is given raw and unground, vast numbers of these

globules pass through the stomach and bowels unaltered, the jelley being protected by the coating of the globules. One element of the water (hydrogen) too, of which the fat of animals contains a large proportion, is assimilated as well as the dextrine of the starch. For the organs of both plants and animals decompose water and appropriate the hydrogen. But, sir, we shall never arrive at a tythe of these desirable facts and principles which would be so advantageous to the agricultural interests of our country until we have at least one great *Agricultural School*, not only to teach our young men and through them to diffuse what is already known of the application of science to agriculture and its kindred pursuits, but by a course of proper experiments to discover and make common property those great truths and general principles which lie at the foundation of the art on which depends in the greatest degree the prosperity of mankind. How far is agriculture as an art behind other arts! How little has she availed herself of the lights of science! Because individuals have not the means and opportunities of making those numerous, varied, repeated and costly experiments in the fields and farm-pens and laboratory which are necessary to discover what is so desirable to be known—because it requires many accurate and skillful hands and heads to work together, endowed with ample means to accomplish the great results, shall we be content to remain without them—groping in our business as if it were the cave of Trophoneus. Let us recollect that facts and principles difficult to be discovered are of easy application after their discovery. How much labor of thought, investigation and experiment, did it cost Sir H. Davy to discover the principles of *the safety-lamp;* and now any worker in wire can construct one. The profits ensuing from the discovery of the principles on which the fattening of cattle and hogs alone should be conducted, in the most economical and profitable manner, would in one year erect and endow a school of agriculture for the whole United States. To reap that profit not only for one year, but for an indefinite period, the *expenses* of the necessary instrument of discovery *must first be incurred.* That instrument is an agricultural school, one that shall bring to the aid of agriculture *the principles of science.*

Very truly, sir, your ob't serv't.

JOHN LEWIS.

REPORT OF THE MONTGOMERY CO. FAIR;

DAYTON, *October 25th*, 1841.

Mr. Foster—Sir, As promised, I now send you an account of the proceedings of our Agricultural Fair, held at A. Sweynie's hotel and stables, the 21st and 22d days of October, 1841, with the entries and pedigrees, as they appear on our books, and in the order exhibited, leaving you to publish all or any portion, as you may think necessary, in the Western Farmer. Many of the pedigrees are not given, and others not so full as to be satisfactory to stock breeders; but you were present and can supply any omissions that we may make, that would be interesting to your readers; and we promise in future to be more minute, and improve in this, as well as in many other parts of our exhibition.

The premium for the best stallion was a pitcher or goblet, worth $15 00, which was given to George Coffeen's horse Wanton Will by Brunswick, his dam by Irish Richard, g. d. by Blackburn's Buzzard, &c.

The second premium for the second best, was a cup, worth $7 00, which was given to George B. Holt, of Montgomery county, for

his horse Mickinac, aged seven years.—Three other entries, to one of which Jacob Stoker's Printer, by Brimmer, dam by Bellaire, aged nine years, the diploma was awarded.

Brood Mares.—The premium, a cup worth $10,00 for the best brood mare, was given to Henry Garlaugh, of Green county, for his mare Beauty, by Friendly Tiger, dam by Ranter. aged six years.

The 2d premium, a cup 5.00 was given to Geo. Farquhar, of Montgomery county for his brown mare, Lucy Fisher, by Alfred dam unknown, aged eight years.

The diploma was awarded to John W. Harris, Dayton, for his bay mare Letitia Cooper.

The premium, a cup of 5.00, for the best Colt, of either sex, three years old, was given to Geo. Farquhar, for his filly, Maria Clark, by Burns, dam by Alfred.

The 2d premium, a medal of 2.50 was given to D. Buchanan, Shelby county, for his bay horse Colt, by Wm. R. Johnson, dam Polly Taylor, a full sister to old Whipster, of Ky. by Cook and Blackburn's whip, g. dam by Hamiltonian.

The diploma was awarded to W. Rantner, of Montgomery county, for his bay colt, Bobb, by Robert Burns, dam unknown.

The premium, a goblet 5.00. for the best colt of either sex, two years old, was given to Isaac Haley for his horse, Sam Patch, by Printer, dam by Fox Hunter.

The 2d premium, a medal of 2.50, was given to Joseph Kennedy for his filly Polly Hopkins, by Printer, dam by Tecumseh.

The diploma was awarded to Crane and Voorhees, for their sorrel colt, Charley Anderson, by Medoc, dam by Mercury—Timoleon—Pacolet, &c.

The premium, a cup, 5.00, for the best yearling colt, of either sex, was given to Robert Hozier for his sorrel colt, Young Printer, by Printer, dam by Badger.

The 2d premium, a medal 2.50, was given to Henry Garlaugh, of Green county, for his colt by Washington, dam by Friendly Tiger.

The diploma was awarded to Dan. Riler, for his bay filly, "Maid of the Oaks," by Robert Burns, dam by Alfred.

The premium, a cup, 5.00, for the best sucking colt, was given to John Birket, for his bay colt, Lady Washington, by Washington, dam by old Alexander.

The 2d premium, a medal, 2.50, was given to Geo. Farquhar, for his colt, Mary Coapland, by Washington, dam by Alfred.

The diploma was awarded to Peter Kaufman, for his colt by Printer, dam unknown.

The entries in competition for the foregoing premiums, were five stallions, fourteen brood mares, four three year old colts, ten two year old colts, eight yearlings, and ten sucking colts; making in all fifty one entries.

Cattle.—The premium, a pitcher, 15.00, for the best bull, three years and upwards, was given to Peter Williams, of Montgomery county, for his bull Memnon, a three-fourth Durham, aged six years.

The second premium, a cup, 10.00, was given to Isaac Inskeep, of Montgomery co. for his bull, John Green, by Experiment.

To G. D. Ferguson, of Green county, was awarded the diploma, for his bull by Exception.

The premium, a cup, 5.00, for the best bull between two and three years old, was given to John W. Harris, for his bull Tom Morrison, by Gallaway's bull of Green co., and his sire, imp. Rantipole.

The 2d premium, a medal, 2 50, was given to Geo. B. Holt, for his bull, Potiphar, by imp. Hazlewood, dam imp. Strawberry, bred by Geo. A. Smith, of Highland county.

The diploma was awarded to Jesse Parsons, for his bull, Red Bill.

The premium, a goblet, 5 00, for the best bull calf between one and two years old, was given to Isaac Inskeep, for his calf Capt. Annanon, by Barnby, dam Victoria, by Experiment, dam by Duroc, &c.

The 2d premium was given to Charles Haskins, for his calf Uncle Jack Marshall, by imp. Marshal, dam Miami, by imp. Whitaker, three-fourths short horned Durham, bred by Charles Anderson, Montgomery county.

The diploma was awarded to Fred. Sinks, for his calf, by John Green, dam unknown.

The premium, a goblet, 10 00, for the best brood cow, three years old, was given to Col. Isaac Partridge, Montgomery county, for his cow Victoria, by Experiment, dam Duroc, and calved in the Scioto Valley, in 1837.

The 2d premium, a cup, 5 00, was given to E. Burrows, of Warren county, for his cow, Susan, by Adonis, dam Emma, bought of L. Pugh.

The diploma was given to Geo. B. Holt, for his cow Scioto, by Waterloo, dam full blooded Patton stock—see Herd Book—calved in 1835.

The premium, a goblet, 5 00, for the best heifer, between two and three years old, was given to Jesse Parsons, for his heifer Lady Lexington.

The 2d premium, a medal, 2 50, was given to John Colhoun, for his Dairy Maid

The diploma was given to Col. Partridge, for his Red Bud, by Barnby, dam by Duroc.

The premium, 5 00 for the best heifer, between one and two years old, was given to I. Inskeep, for his White Jane, by John Green, dam Milley, by John Patch.

* The diploma was given to Geo. B. Holt's Poll Patton, by John Bull, dam Scioto, by Waterloo.

* The 2d premium, a medal, 2 50, was given to I. Inskeep's Cherry, by John Green, dam Flora, by Reformer.

The premium, 5 00 for the best calf, under nine months old, was given to Col. Isaac Partridge, for his calf, Zero, by Potiphar, he

by imp. Hazlewood, dam Raitos, and she by imp. Whitaker, dam Beauty, by Tariff.

The 2d premium, a medal, $2 50, was given to Geo. B. Holt's calf, Morning Star, by Potiphar, dam Snowface.

The diploma was awarded to Col. Partridge, for his calf Violet.

There were three entries of calves, between nine and twelve months old, for which there was no premium offered, but upon a recommendation by the judges, the officers of the Society awarded to Mr. E. Burrows, of Franklin, Warren county, a medal for his calf out of Susan, by Adonis.

The number of entries for the above premiums, was, for bulls, five; for bull calves, between two and three years, three; for calves under nine months, six; between nine and twelve months old, five—making in all thirty-five entries.

Judges upon Cattle,—Nathan Graham, of Warren county, E. Newcomb, Montgomery county, A. Malat, Butler county.

Hogs.—The premium, a goblet, $10 00, for the best boar, of any age, was given to Geo. B. Holt, of Montgomery county, for his boar, Oliver Twist, a thorough bred Berkshire, by Brown Orange, and his dam, by Paragon, aged two years.

The 2d premium, $5 00, was given to Kerrfort and Spinning for John Bull, by Reading, dam Lady Albany, aged ten months.

The diploma was given to E. Newcomb, for his Dick Johnson, a thorough bred Berkshire boar, aged twenty-two months.

The premium, a cup, $5 00, for the best breed sow, was given to R. H. Hendrickson, of Butler county, for his thorough bred Berkshire sow, Flamosa, by Mink, out of the imp. sow Peggy. Mink's dam was out of the imp. sow, Sally, by the imp. Boar, Jack, of Newberry, aged two years.

The 2d premium diploma was given to R. H. Hendrickson, for his sow Bets, by Reading, out of Persina, she by Jack Downing, pigged out of old Superior.

The diploma was given to Geo. B. Holt's thorough bred Berkshire sow, Madam Tab, by imp. Newbury—her dam was bred by the Shakers in New York, by Blackhawk, out of old Maxima.

The number of boars, sows, and pairs of pigs exhibited in competition for the premiums and certificates, was twenty-seven.

For premiums upon boars nine, for premiums upon cows, ten; for certificates, eight.

Judges upon Hogs.—G. P. Williamson, of Logan county, A. Malat, of Butler county, J. M. Chivers, of Miami county.

There were five rams and two ewes exhibited, and the premium of $5 00 upon rams was given to Geo. Gephart, for his Saxony ram, and to J. Morrison for the best Saxony ewe.

There were three entries for premiums upon fat cattle; three upon fat hogs; and two upon fat mutton. E. Newcomb received the premium of $5 00, for the fattest bullock, and also for the fattest hog, and Geo. Gephart for that upon mutton.

For the premium upon ploughs there were five entries, but in practically testing them, the judges did not believe the work performed such as should be commended by this society, and therefore the premium was withheld.

The jeans, sattinetts, blankets, coverlets, woolen hose, yarn, and bed quilts, were all such as the officers of this society expected to see exhibited, from the industry, economy and good taste of the mothers and daughters of Montgomery county.

The premium for 16 lbs. of the best cheese was awarded to Augustus Fenner, of Miami county; and the second to Charles Haskins, of Montgomery.

There were ten entries of 5 lbs. each, butter, for the premiums. The first premium of a silver cup, $5.00 was given to Mrs. Joseph Kennedy; the 2d, medal, $2.00, was given to Mrs. John Colhoun; the third, diploma, was given to Mrs. George Ivens.

The spirit manifested, and interest taken by the ladies of our county in whatever portion of the exhibition is allotted to them, gives an assurance, that if our fairs can be kept up, and I am sure they will be for one or two years more, we shall be without fear of success.

Until very recently the universal feeling has been in opposition to what is called book farming, or more properly, opposed to one farmer's communicating his experiments and modes of cultivating his farm to others more inexperienced and not so successful as himself: so it is, in part, with the agricultural societies of the west; they meet with opposition from those whose interest it is to encourage and support them. Others there are who do not openly oppose them, but are averse to improving the breed of their animals; they have an abundance of corn, hay and oats to fatten their hogs, feed their cattle and horses, and will not aid in keeping a Durham bull or Berkshire boar, at a cost of five or ten dollars for the present, with the prospect of a saving in corn and hay of triple the value in one winter.

We hope, with the assistance of a few thousand copies of your paper, the Western Farmer and Gardener, the coming three years will tell a different tale for the farming interest of our Miami Valley.

The officers of the society, chosen at the late meeting, are

CHARLES ANDERSON, Pres't.
GEORGE B. HOLT, Vice "
VAL. WINTERS, Treasurer.
H. L. BROWN, Rec. Secretary.
D. R. ESTEE, Cor. "

Executive Committee.—P. Voorhees, John Colhoun, John W. Harris.

Assisting Committee.—P. Aughinbaugh, Phil. Mort, Robert W. Steele, Cyrus Hull, Col. J. Partridge, Dan. Riler.

With wishes for the dissemination of agricultural knowledge, I remain yours,

The Recording Secretary,
Montgomery county Agricultural Society.

For the Western Farmer and Gardener.

Trembles or Milk Sickness.

Mr. Editor,—I am pleased to see in your paper a discussion of this terrible disease and its cause; and as I have paid much attention to both, and had many opportunities of investigation, I will also express my opinion.

I am not prepared to say that your correspondent, T. S. Hinde, is *right*, but I am most clearly of opinion that Dr. Drake is wrong, when he asserts that the *Rhus Toxicodendron* is the cause of this disease. I have been acquainted with this plant for many years, and I know that it grows in some parts of this county in sufficient abundance to poison all the cattle in the vicinity. I have seen cows, horses and sheep eat it frequently and freely, but I have not yet seen a case of Milk Sickness in Muskingum county. This is a strong case, and as you say, against the *Rhus Toxicodendron*, but yet it may be the cause of the disease under consideration. To test the matter still further, I propose that Dr. Drake, T. S. Hinde, myself and such others as choose to join in the experiment, administer the extract to one of the inferior animals, a dog, for instance, and feed the green plant to a calf, carefully note the symptoms, and report to you on the first day of the next year. This course will settle the matter with respect to the Doctor's hypothesis; and if he be wrong, as I am persuaded he is, Mr. Hinde's nondescript may be tested in the same manner.

My friend, Moses Ayers, a wealthy farmer and salt maker, of this valley, who has traveled much through Ohio, Indiana, Illinois, Missouri and Kentucky, assures me that he has for many years been able to fix upon the localities of this disease, by his knowledge of the plant which produces it; and that he has never once been mistaken in his judgment. When questioned with a reference to the *Rhus Toxicodendron*, he confidently asserts that the true cause of the Milk Sickness is a different plant. I have much confidence in his judgment, especially as I know that he is acquainted with the species of the *Rhus* spoken of by Dr. Drake.

But after all, may not Mr. Hinde's *nondescript* be a species of the Rhus mistaken by the Doctor for *Toxicodendron*, as great men are not always close observers, or a variety of the *toxicodendron* must be taken by Mr. Hinde and Mr. Ayers for a different plant. I should like to have an opportunity to investigate it. Perhaps the figure which you propose to give of it, and which I hope will soon appear, will enable me to meet with it in some of my botanical excursions—or perhaps Mr. Hinde can favor me with a few seeds. The subject is one worthy of investigation, and to enable those who have not books of reference at hand, to pay some attention to it. I shall conclude by giving the following standard definition of

Rhus Toxicodendron.

Genus Rhus—5th class, 1st order—flowers inferior: Calyx 5: parted: petals 5: berry 1 seeded, small subglobular.

Species Toxicodendron—Leaves ternate, or in three, leaflets oval, entire or sinuate—crenate, racemes on the branches and axillary, sessile, dioceious.

Variety 1. *Radicans*—Stem climbing and rooting, leaflets broad, entire, or with scattered teeth.

Variety 2. *Quercifolia*, (oak leaf Sumac) erect, low, leaflets variously sinuate-lobed, (poison oak.)

Variety 3. *Microcarpa*, Leaflets oblong—oval long—acuminate, subrhombic: fruit very small.

The stem of the whole species is woody—flowers green, appearing in July. It delights in moist, shaded situations,—but is sometimes found in dry, open places. I have met with all the varieties in Muskingum county, except the last, and it may exist here, and have escaped my notice. S. R. JONES.

Mulberry Grove, Zanesville,
Tuesday, Sept. 21, 1841.

Crops in Mississippi.

We insert the following extract from a letter of our especial friend and valued correspondent, M. W. Philips, Esq. of Hinds co., Mississippi, upon the prospect of the crop there, this season, feeling that accurate knowledge on this subject must be of vital importance to the whole country. Such communications from every section would aid the cause, and be an invaluable guide to all western operations. We call upon those interested in this subject (and what man is not) to reflect upon the good that would accrue from a well organized system of agricultural statistics being kept up and registered. Indeed no subject that we are acquainted with is more worthy the attention of the farming community.

LOG HALL, Oct. 27, 1841.

Mr. Thomas Affleck, Cincinnati,

"MY DEAR SIR—The interest in stock and farming is fast gaining ground: every body talks of it; in every little clique you will hear some point of farming discussed—all seem to be alive to the interests of farming, and I am laboring might and main, to keep it up and increase it. Now is the time to get up a paper in Mississippi, and if some spirited individual, with some means, were to exert himself, I make no doubt a handsome affair could be made of it. I have learned, from some source, there was one now in the State, but I have never seen one of the numbers, nor know I where it is at.

Our staple crop has received a severe cut off by the frost, since the 22d, that move being the first, since which we have had three, thermometer at 30, at half an hour after sunrise on the 26th, and if I can judge by the one I have the management of, (it will not exceed half a crop) the crop of Mississippi will fall short one third. In 1839 the crop of Mississippi, according to the returns made by the United States' marshal was 482,800 bales. I suppose the crop of '40 must have been short of 450,000, and I feel every assurance that the crop of '41 will fall short by 150,000 bales of last year's crop. I speak of many crops I have seen as not exceeding one half crop. I know of no crop that will come up to '39, and but three that will come up to '40, and but one that will exceed '40. Whereas, I know of one that last year made fifty four bales off of fifty acres, who, this year, with a hundred and twenty five acres will not nor can exceed sixty; another with two hundred and fifty acres may make sixty; last year over a hundred.

I can also speak from many sources, where I have the testimony of gentlemen, no one, either verbally or by letter, estimate at over two thirds, and a very intelligent and inquiring correspondent writes 'an early frost will make a short crop indeed;' and the frost arrived ere his letter was brought by the mail.

"Now, sir, if the crop of the United States is all after the manner of Mississippi, we cannot calculate on more than one million four hundred and seventy thousand bales—admit it to be only one fourth short of the big crop of '39, then we have only about one million seven hundred thousand bales. This, following the crop of '40, must insure us an advance on present prices: but unfortunately for the producer, his necessities compel him to sell ere an advance can be relied on.

"Yours very truly,
"M. W. PHILIPS."

Silk Manufacture.

IMPROVED MACHINERY.

(Copied by request.)

A citizen of Ohio has invented an improved apparatus for feeding and cleaning silk worms, by which one man may attend *half a million* of worms in a season. It secures the most perfect ventilation and thereby keeps the worms in healthy condition—enables the tender, as often as necessary to change them, to the number of a *hundred thousand* in a few minutes—furnishes the worms with a complete chamber for winding their cocoons—renders the labor of picking the cocoons comparatively light, and saves all the floss perfectly clean.

The inventor has had the misfortune lately to lose all his property in the destruction of his cocoonery by fire, and is, therefore, unable to obtain a patent for his invention. He offers the right (when secured) to any ten counties in the State of Ohio, (save one) to any person who will furnish him with one hundred dollars for the purpose of obtaining the patent. Any person disposed to engage in the enterprise, and to furnish the inventor with the sum specified, he will wait upon,

exhibit a model of his invention and explain its operation, and, if such person be not satisfied that the machinery is what it purports to be, will be at liberty to withdraw his proposal.

The inventor has had several years experience in the silk business, and would like a situation as superintendent of an extensive establishment. Persons wishing to correspond with him on the subject of his invention can learn his address by personal application, or by letter, post paid, to the Editor of the Ohio Free Press.

This proposition is certainly fair, as no advance of funds will be required until the model shall have been exhibited.

Herewith we give the portrait of Anna Fisk, the property of Mr. Joseph Wasson, of Leesburgh, Bourbon county, Kentucky.

Anna Fisk is red and white, and was bred by B. Warfield, Esq., calved on 12th of July, 1834, got by Oliver, dam Beauty, by Mohawk, g. d. Pink, by a bull bred by James Munday, by the imported bull Rising Sun, out of the imported cow, George Ann, g. g. d. the imported Teeswater cow of the late Capt. Wm. Smith; Mohawk, by San Martin, out of the Tecumseh heifer, (alias Lady Kate,) she by the imported bull Tecumseh, dam imported cow, Mrs. Motte; Oliver by imported bull Memnon—see herd book—out of Garcia, she by imported bull Malcolm—see herd book—out of imported cow Delight—see herd book.

Anna Fisk is a remarkably thrifty animal and a superior breeder, and has brought the following calves viz: by Amena, by Matchem, the property of Col. B. N. Shropshire, of Bourbon co., Kentucky; Bourbon, the property of George W. Williams, Esq..; Desdemona, the property of Col. Shropshire; Lance, sold to C. Foster, publisher of the Western Farmer and Gardener; and last, though not least, in our esteem, Amena the 2d, calved in the latter end of September, 1841, a lovely roan, by Ottley.

Anna Fisk has been four times exhibited, and took one premium and one certificate; she is in fact a splendid animal, as her portrait will sufficiently demonstrate.

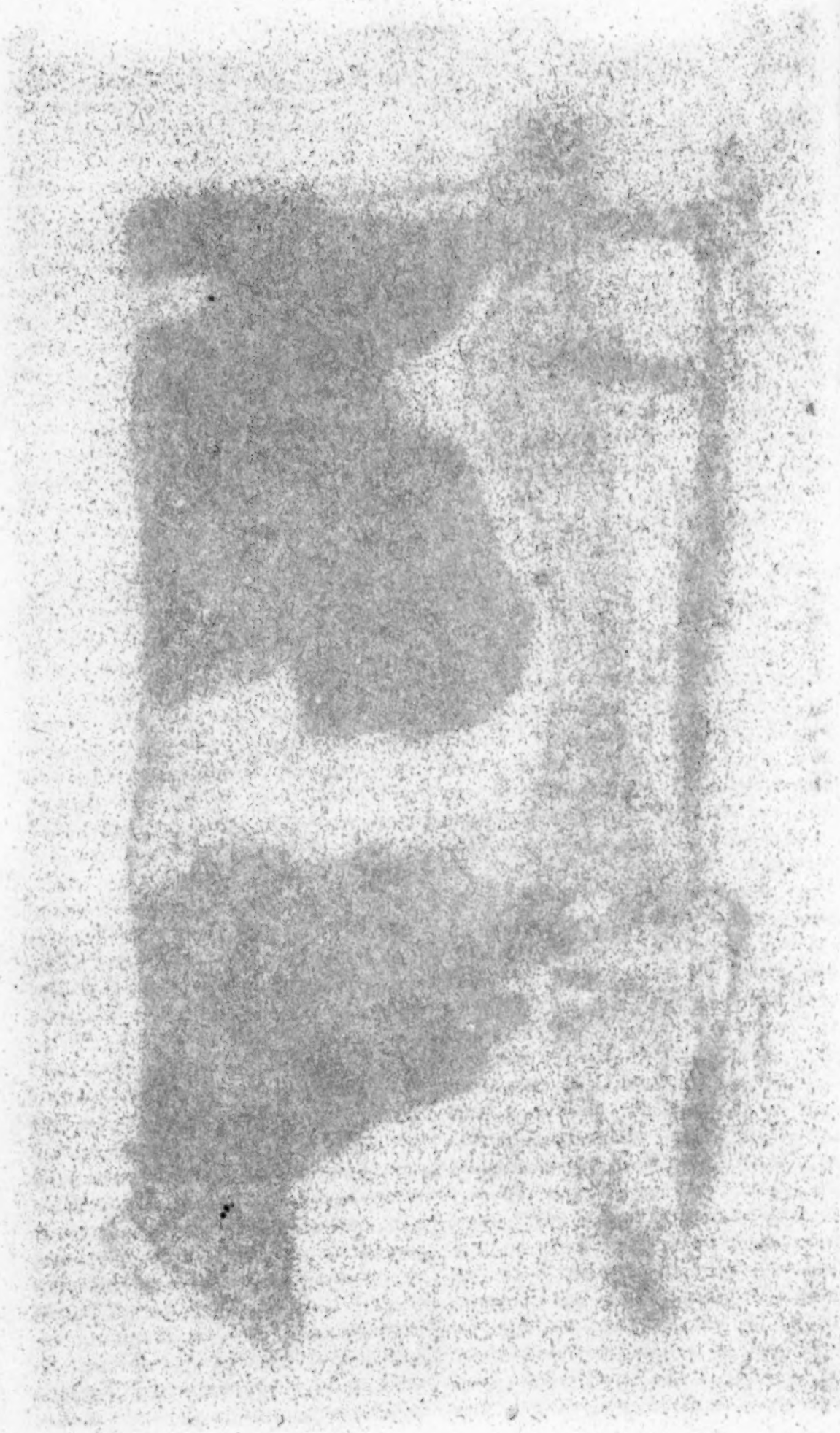
Cottages.

When men are seeking present shelter, from the winds and rains, when their necessities call for immediate relief, then the quickest and easiest way of getting a tight roof over their heads, must be resorted to—is the best. These rude tenements, however, are not eternal, and in a few years, in the natural progress of events, they go to decay and ruin. Then men build again. To these I would speak: not to these only. Is it too much to ask those who are about to build at their leisure, that they should give to their houses as much attention as they do to their hats, upon which they think a brim needful and becoming? Love of country is thought admirable, and praiseworthy; statesmen and poets, rich and poor, mostly agree in this; but as a provocative to virtue and happiness, it must surely sink into insignificance, compared with the love of home, besides that the first very naturally comes after this last. If this is true, it seems to me that this business of house building is not altogether unworthy of attention. —Early association with beautiful forms, fine proportion, and the thousand evidences of good taste, that may be disposed about the home of one's youth, will prepare the mind to look for the gratification of the senses, anywhere, but in the common pleasures of the coarser taste: and to detect the more delicate and

The property of Joseph Wasson, Esqr. of Leesburg, Bourbon County, Kentucky.

ANIMA FISH.

The property of Joseph Watson Esqr of Leesburg, Bourbon County, Kentucky.



hidden beauties that are to be found through all nature and art. These things satisfy, to some extent, the longing that exists, more or less, in us all, and take the place of noise, riot, and unthrift, which smother perhaps, but do not answer, this desire. I do not recollect ever to have met with the man who possessed this somewhat elevated tone of feeling or sentiment—who was interested in gardening or agriculture, for himself, and not altogether for gain, who could occupy himself in the bringing out and increasing the various beauties that surround his own dwelling place and that of every poor man out of the city, and of many in it, one who could find pleasure in the proportion and beauty of a house, gracefulness in the form of a tree, who marked the changing colors on the neck of the raven, or listened to the reedy notes of birds —who stepped aside from the violet that he might not crush it—I do not remember ever to have known such a man to become either a misanthrope or a sensualist. He "finds tongues in trees, books in the running brooks, sermons in stones—"

It is possible that calling attention to the barrenness of many of the commoner kinds of houses that are going up daily, both in city and country (of which I give a rude representation,) may tend to make a change in the form of the building, at least.

The most of those who build so cheaply may not meet with such a little exterior as that which I have given at the head of this article; still, those who do, may be able to do something, by precept, and perhaps by example, to influence the purpose of others. I am persuaded that a few (two or three) instances of this small country house, which admits of many pleasing forms, would do much toward bringing about a change beneficial to the possessor, and pleasing to the man who passes on the road, on business or pleasure. Its advantages and beauties would so recommend it above the other, that none would hesitate. The only excuse for putting up such a crude shape as this last is that it answers as a rear to a house, whenever one is built in front of it; which indeed, in some instances, appears to be the intention. This (though I doubt) way be sufficient to make it tolerable in the city, but loses all its force when applied out of it, and the man who builds it up on a half acre lot must be accused of a blind following of a custom, without "reason," to him, and certainly without "rhyme." I am inclined to believe that the first of the two examples may be built as cheaply, if not more so, than the last; for all know that a given number of superficial feet may be enclosed in a square, with much less extent of wall than in a parallelogram. For instance, a space of twenty five feet square, when in an oblong of twelve and a half feet, by fifty feet, will require one quarter more wall than when enclosed in a square. In the first instance the building will measure one hundred and twenty-five feet in circumference, in the last one hundred feet. The small thatched stone houses, so common in England, are not generally practicable here, for various reasons, and when attended with additional expense, perhaps not desirable, for our tendency is not to repose, but to progress, and to too great change: beside this, the stone house, when not furred off before being plastered, is apt to be damp, and the thatch will not so well stand our changing climate:—but we need not neglect altogether

the things which have made English cottages models for this kind of building. Among these it seems to me that the projecting eaves and roof hold a prominent place. This improvement is easily adopted: it makes more evident the purpose for which the roof is intended, shades us from the strong heat of the summer's sun, and shelters from the peltings of the driving storm: it gives one a sense of comfort and security, and is always pleasing, tho' we are not always conscious of the reason. I have put together some few thoughts that may interest some other or others, and have mentioned but one or two of the many improvements that may be made in this cheapest kind of rural dwellings. I may hereafter speak of others—the porch, the casement windows, &c., as well as of various ornaments and elegancies, of which the interior is susceptible; beside this there are the grass plat and garden, which are not altogether unworthy of attention.

Cincinnati, Dec. 1841.

For the Farmer and Gardener.

Scraps from my Farming Note Book.

BY J. P. KIRTLAND, M. D.

Professor of Theory and Practice of Medicine in the Medical College of Ohio, at Cincinnati.

Too much and indiscriminate medication annually destroy thousands of valuable animals upon our farms. I often shudder to see the recklessness with which remedies are administered, without reference to dose, quality or adaptation to the case. On my own farm it has ever been an established rule, that no drug should be given to an animal empyrically, or, in other words, till both the nature of the disease and the medicine are understood. I have ever found it better to leave the case to the efforts of nature, aided by good feeding and careful nursing, than to the indiscriminate use of medicines that must do one of two things—"kill or cure," unless the indications for their use were so clear as not to admit of a doubt.

There are, however, certain diseases, the symptoms of which are so certain, and the remedies so plain, that the farmer is warranted in trying his skill. Such, for instance is the kidney-worm in swine. Its evidences are not to be mistaken, and the remedy that I suggested in vol. 2, page 76, of the Western Farmer, so simple and at the same time effectual, that the Farmer would be remiss who would neglect even a swine laboring under that complaint.

I believe I cannot be doing my farming friends a greater kindness than by suggesting that it frequently happens, that horses which have been running at large, in pastures, for some time, till they become unaccustomed to hard labor, are taken up and suddenly driven rapidly, or perhaps put upon a journey.

To sustain the animal under his great fatigues, he is also probably fed bountifully with oats or corn. A consequence of all this, is, the digestive process is arrested, the mucous coats of the stomach and intestines become irritated and perhaps inflamed; the bowels are rapidly distended with wind, the periotoneal coats of the intestines and cavity of the abdomen put on high inflammation, effusions soon follow, and the animal dies in great agony, in an hour or two, with what is popularly called the "*wind cholic.*"

I have seen several cases of this character promptly cured by the following method—Prepare, as soon as possible, an infusion of tobacco, *two drachms* (one-fourth of an ounce) to *one quart* of boiling water. After boiling them together for five or ten

minutes, strain and add to the liquor one gill of molasses. When the fluid is sufficiently cooled, throw it up as an injection by means of a large syringe.

It sickens the animal extremely, and reduces his muscular powers so much, that he can hardly sustain himself upon his feet, but the disease will immediately subside. A dose of salts or castor oil should then be given by the mouth. During the day he should be suffered to run out, if the weather be mild and pleasant, but must be stabled at night. No greater quantity of the tobacco should be used than the amount specified; more will endanger the life of the animal.

Deleterious effects of the Cicuta, Hemlock or Conium Maculatum.

Some years I sowed a few seeds of this plant by the fences on the margin of my apple orchard. They vegetated, and in two or three seasons great quantities sprung up in the vicinity. During a severe winter in which the ground was covered with snow for several weeks in succession, my store hogs were confined in this orchard, and several of them sickened and died suddenly, with symptoms of an affection of the brain, stupor, convulsions, frothing at the mouth and livid color of the skin.

At the time I had some suspicions that it was produced by the roots of this plant, as I discovered the animals had been rooting them up from beneath the snow.

No further attention was paid to the subject at that time, but during the next ensuing winter, I had five or six other swine die with the same train of symptoms, and under similar circumstances others of the drove sickened but ultimately recovered.

A thorough investigation of the matter confirmed the conclusion that the disease was occasioned by eating the roots of this plant.

Swine will not probably even meddle with this article unless they are compelled to it by the want of other green food during winter when the ground has been long covered with snow.

Deleterious effects of the Wild Cherry.—Cerasus Seratoni of Torrey & Gray.

I have known several cows at different times destroyed by eating freely of the wilting leaves of this tree, soon after it had been fallen during summer. Both the leaves and bark abound in Prussic acid, and when cattle eat freely enough of them, this article will soon destroy life. When this species of tree is fallen at the time it is covered with foliage, the farmer should be careful to keep his cattle and sheep out of its way until the leaves are entirely dry.

The meat contained in the stone also abounds with a great per centum of this powerful acid. Hence it is that children are sometimes made excessively sick by eating them. From the same source arises in part the violent sickness combined with intoxication, induced in both children and animals, by eating any considerable quantity of wild cherries that have been employed in manufacturing cherry bounce.

For the Western Farmer and Gardener.

Inefficiency of our Laws for the Protection of the Products of the Earth.

To steal the goods of the merchant, the manufacturer or mechanic is in the eye of the law a crime; but the law does not recognize it as

a crime to pilfer our farms, orchards and gardens.

In the one case, if the articles taken amount in value to some twenty or thirty dollars, the depredator is liable to conviction for a penitentiary offence. In the other, all the redress that is afforded is a civil suit for damages, and in these instances the vulgar adage is usually verified: "You may sue a beggar and catch a l——e." You may sue the abandoned wretch that has robbed you of the fruits of your labor, and you may content yourself with paying the costs. He cannot be compelled to do it as he is irresponsible.

This we believe is the extent of our existing laws. Horticulture, in its various departments, has become a distinct branch of business in certain parts of our State, giving employment to many individuals and much capital. Large sums of money are annually expended in importing from Europe, as well as the Atlantic States, new and improved varieties of seeds, vegetables and fruit trees, which are usually in the end of more benefit to the public generally than to the individual who makes the importation. The productions of these choice articles too frequently excite the cupidity of the vicious part of community, and the want of a law to restrain them, leads to the conclusion on their part, that there is neither injustice nor immorality in pilfering a neighbor's garden or orchard; otherwise the law would recognize such an act as a crime.

We can discover no reason why we, as husbandmen, should not be placed in our statutes upon as good a footing as people of other callings; and why the results of our labors should not be as well guarded by law as theirs.

Petitions will be presented to our Legislature during their present session, praying them for the enactment of a law that will accomplish this purpose. It is hoped that your subscribers and every one interested in this subject, will not fail to sign his name to such petition. A Farmer.

The Orchard.—No. 2.

If our peaches are frequently blasted by the cold, the trees are not affected by the "yellows." I do not remember having seen a single tree in this neighborhood, attacked with this disease. Nor are our apple trees infested by the "borer." We have but few plum trees: no appearance of the "black blight" or gumy excrescences has been discovered among them; the ravages of the curculis are acknowledged. Our pear trees have rarely suffered from "blight."

Our oldest seedling orchards have been planted about 33 years: the trees were obtained of Ludlow, near Cincinnati. Grafted trees began to be planted about 22 years ago.

By *frittered*, I mean a broken, curled or fragmentary state of the red; not a uniform blush.

By *verge*, I mean the circular ridge surrounding the stem and eye.

By *lineoles*, (pronounced li' ne-oles.) almost imperceptible, short lines, which give the skin of the fruit a corrugated, or shrivelled appearance; yet under the microscope, they are found not to be wrinkles, but slightly elevated lines, which I believe are always dull or lacklustrous.

Pears.—(Pyrus communis.)

Sugar.—Size, 3 inches long, two six-tenths wide. Form, turbinate. Pulp, very juicy. Color, yellow. Surface, dull; covered with fine dots. Flavor, a very agreeable sweetness. Stem, eight-tenth inches; moderately stout; not sunk; somewhat pitted, with an elevated point in the pit. Eye, open; in a considerable cavity Seeds, brown.

Syn. Autumn Catherine, &c.—Late Catherine.—Size, two three tenths inches long; two inches wide. Form, variable; turbinated, globular. Summit mostly rounded and without depression. Base, without depression. Pulp, juicy, tender, almost melting. Color, greenish yellow, with a blush. Surface, generally rather dull. The blush is formed by the coalescence of red areolæ surrounding numerous light brown dots; it is susceptible by friction, of a high polish. Flavor, sweet, musky, with a spiciness; very pleasant. Stem, nine-tenths inch long; moderately stout; frequently forced to one side by a tumefaction of the base, which makes a crease on the opposite side of the stem. Eye, rather prominent; very open, showing the stamens. Seeds brown.

The tree is of very handsome growth; and

is an abundant bearer. The fruit ripens the beginning of the ninth month. This luscious pear is said to be the original of the seckel pear; which it certainly very closely resembles. The late catherine is also called musk or spice pear; but I see in some of our western catalogues, the musk or spice pear is marked as fall fruit, and the late catherine is called a summer fruit. Such instances of variable nomenclature evince the necessity of an accurate system of description.

Early Butter.—Size, two and three-tenths in. long; and the same wide. Form, almost globular; narrowing downward, making it somewhat conical. Summit slightly flattened. Pulp, superlatively juicy, melting and tender. Color, fine yellow Surface, speckled all over with small brownish dots; with various blemishes; dull. Flavor, sweet and slightly mawkish. Stem,—in. long, slightly sunk. Eye, a little depressed; rather closed. Seeds, brown.

This pear ripens the beginning of 9th month. Its sweet and copious juice and extreme tenderness make it desirable; but it is too transient, to make more than a few trees profitable. This does not appear to be the early beune of the London Horticultural Catalogue; and I find no notice of it under this name, (and I know no other,) in Prince's commendable descriptions of pears, or in any other work devoted to fruits.

Seckel.—Size two and two tenths of an inch long, two inches wide. Form, conical, downward. Pulp, tender, superlatively juicy.—Color, greenish, often with a fine blush. Surface, most of the surface of a dead stony appearance, with very minute dots. Flavor, luscious, perfumed. Stem, six tenths of an inch long, in a slight depression. Eye, open, moderately sunk. Seeds, brown.

This tree is of very tardy growth, but is universally acknowledged to bear superior fruit. In the Orchardist's Companion, the surface of this fruit is said to be "glossy." It ripens in ninth month.

Trenton.—Size, two and three tenths inch wide, three inches long. Form, turbinated, remarkably resembling a child's top. Pulp, moderately moist. Color, greenish yellow. Surface roughened by very small prominences, many of which are tipped with very fine dots. Flavor, sweet, but spoiled with astringency. Stem.—of an inch long, attached to a pointed base, stout. Eye, level, open. Seeds, black. This pear ripens in the ninth month. It is hardly worthy of cultivation.

Holland Green.—Three inches long, and the same wide. Form nearly globular. Pulp hard, moderately juicy. Color, greenish. Surface dull, closely covered with brownish dots, and crowded with minute punctures, roughening it like a rasp. Flavor sweetish. Stem, one inch long, or under with an eruption of flat spots. Eye, open, umbillicated or sunk. Seeds, black.

Ripe in 9th month. The tree is productive: the fruit generally used for making preserves. Hardly worthy of cultivation. By most pomologists it is marked as an "outcast."

Richmond, Ia. 1841. I. T. P.

For the Farmer and Gardener.

Cincinnati, 2d Dec., 1841.

MR. EDITOR—Sir: I find, on looking over various Agricultural papers of the U. S., that Dr. S. D. Martin, of Kentucky, has published a trial made by himself, and Jas. F. Taylor, of feeding a Berkshire sow and two Woburns, for ten days, and as the whole particulars of the case have not been published by the Doctor, I feel anxious that they should be, for the information of all concerned, and as he is such a stickler for *facts*, he, of course, will have no objection to what I am about to state.

What I learned of this trial of feeding between Dr. Martin and Mr. Taylor, was at the Doctor's own house last September, when I visited him in company with Mr. Affleck, Editor of the Farmer and Gardener. Here I met Mr. Jas. F. Taylor, and heard him and Dr. M. discuss the whole subject, and I must confess after which I could not but wonder, that the Doctor had come out in the public prints, and published this trial, as I think it can be made to appear, from all the facts in the case, that he has gained nothing by it, only so far as it helps to make a noise about his hogs, and keep them before the public.

It appears on the 13th August last, Mr. Taylor placed a Berkshire sow of his, and Dr. Martin two Woburn sows in the hands of a Mr. Weathers, a disinterested man, to be fed for ten days, on 5 lbs. of corn per day. Mr. Taylor is a nephew of the Doctor's, and Mr. Weathers is a tenant; these things I state because they are facts. Well, as to the result: Dr. M. and Mr. T. agreed as to the gain of the Berkshire sow and one of the Woburns, which they said was 21 lbs. each on fifty-two lbs. of corn, in ten days, but upon that of the other Woburn sow, (Courtenay) on the same allowance, and same number of days, they disagreed; Dr. M. asserting that she had gained 30 lbs., while Mr. Taylor contended that she was incorrectly weighed, and that he did not believe that she had made any such gain. I now contend that Dr. M. has published to the world what is not a fact, for it is disputed by his own nephew. Mr. T., that the Woburn sow, Courte-

nay, did not gain as much as was represented she did.

The Doctor goes on to state, from this trial made with Mr. Taylor, that it is a fact that the Berkshire hog is a greater consumer than the Woburn, (see his communication particularly to the Tenn. Agriculturist, Nov. No., page 259.) Now only hear what he told me in a private conversation on this very subject. He said that, on the day he brought home his Woburn sow, from Mr. Weathers's, he told his man, Patrick, to put up his sow, Courtenay, and give her as much as she would eat, for two days, and then they would weigh her again. He did so, and found she eat a bucket of swill! a bucket full of apples! and nineteen ears of corn! and gained 19 lbs., and, from these facts, the Doctor concluded that the Berkshires were the greatest consumers! The gain of 19 lbs. in two days, was principally in the weight of food given her, and with which she had gorged herself, and I believe just as much in it, admitting that the Doctor was correct, as I do in an animal gaining 30 lbs. of *flesh* on 51 lbs. of corn. Such a thing was utterly impossible, and if she did weigh 30 lbs. more at the end of the ten days, it was because her stomach was full of water, or something else besides the 51 lbs. corn consumed.

It will now be seen, that the trial between Messrs. Martin and Taylor proves nothing at all to me regarding the relative merits of the different breeds of swine, and inasmuch as the Doctor has been bragging and bantering the whole world to feed against his Woburns, and as I do not believe that there has ever been a fair test yet made, I propose selecting six of my Berkshire pigs, 3 months old, and I call upon Dr. M. to select the same number of his Woburns, and put them into the hands of a disinterested man together, to be fed from twelve to fifteen months, in the usual method of feeding hogs for pork, to pasture them in the summer, and to have all the grain measured that they consume, and then let them be drove to this market, or any other that may be agreed upon, and the hogs weighed alive, then killed and weighed again, and the whole trial to be published to the world.

I am now busy in packing pork in Covington, Ky., and I wish to mention a *fact* with regard to a lot of 103 head of hogs, 69 of which were one-half and three-quarter Berkshire, belonging to N. McNeese, of Harrison county, Ky. The whole averaged 268 lbs. gross at home, and after being drove 50 miles to this place, and kept on hand several days, they were slaughtered, and weighed 219 lbs. nett. The usual loss between gross and nett weights, in common hogs, is one-fourth and over; this shows a gain of 18 lbs. per head in this lot, and had the Berkshire cross been weighed by themselves, it would have been still greater. I do not think their loss between gross and nett weight would have been over 40 lbs. a hog, or less than one-sixth.

So thoroughly am I convinced, in my own mind, that the Berkshire hog is superior to all others, that I am anxious to have a fair and impartial test made between them and any other breed, and the sooner it is done, the better. As far as I have been able to learn from those to whom I have sold Berkshire pigs, none have been disappointed in them. A correspondent of mine writes from Tuscumbia, Alabama, under date of 19th Nov. last, informing me that a lot of Berkshire pigs I had sent him, had arrived safely. He said he had an opportunity of seeing one or two pairs of Dr. Martin's thorough-bred Woburns. "There is," says he, "humbuggery in the Doctor; his hogs *won't do what he says they will.* They are a large bone, coarse hog, and not a good shape; and as to their being sustained on less food than any other breed of hogs, is out of the question, his experiments to the contrary notwithstanding. To say that a large-boned, coarse-haired hog, that will not mature short of 3 years, and weighing from 8 to 1200 lbs. can be sustained on the same amount of food, that a neat-boned, muscular, compact hog, that will mature in from 12 to 20 months! Contrary to Nature and Philosophy, and any individual instance to the contrary proves an exception to a general rule." He further remarks, "that the Doctor states, in a letter to a friend of mine, that he has not yet ascertained at what age his Woburns would mature, as as he has never fed any long enough, though he has fatted some over 3 years old."

Those papers that have copied Dr. Martin's trial of the Woburns and Berkshires, will, as an act of justice please do the same with the above.

Most respectfully,

John Mahard.

For the Farmer and Gardener.

Mr. Affleck—In a late number of the Foreign Quarterly Review there is an article on Hugel's Travels in Cashmere. This portion of Asia is so greatly celebrated for its climate and natural productions, and being withal so enclosed by mountains, as to have been considered by older travellers the seat of Paradise. From this country are brought those precious shawls manufactured from the hair of the Thibet goat, a single pair occupying twenty four persons twelve months in the making and selling in India, for three thousand rupees, or about fifteen hundred dollars. My object, however, is to lay before your readers a description of some of its vegetable productions, thinking it may be interesting, if not useful, to the horticulturists of Ohio.

"Of all the trees, the stately deodar (or gift of God) a species of cedar, whose blossoms are covered with a peculiar yellow dust, is the most useful to man, and is preferred to all others, as a building material, from its wonderful durability. The chesnut is the same as that found in Europe, except that its fruit is never armed with prickles. The bark, which peels off in strips of a foot long, but still adheres to the bole of the tree, imparts to it an uncommon appearance." Note, in this respect it is similar to the shag-bark hickory of the west, whose trunk is covered with these strips of half detached pieces of bark. This chesnut would be an admirable acquisition to our gardens, as no doubt it would flourish in the southern portion of Ohio.

"Among the Alpine plants is a species of Rhododendron, similar to the Poulicum in magnitude, with rust colored leaves like Rhododendron campametacum. It grows in the snow itself, as well as the Juniper, neither of which plants is to be found in the valley, below 1[illegible],00 feet above the sea.

A rare kind of Barberry merits remark; it has blossoms like the B. aristata, while the fruit in size and color is similar to that of that plant, and is agreeable and sweet tasted.

"The fruit trees of Cashmere are celebrated; there are nine sorts of apples and as many of pears. Moorcroft (a former traveler) mentions eighteen to twenty different sorts of grapes, but Hagel discovered only eleven. The following mode of preserving this fruit, we commend to the attention of housekeepers.

"Three or four bunches are placed on a deep earthen unglazed plate; this is covered with another similar one, and the two are cemented together with lime or gypsum. The whole are then deposited in a dry situation, and the moisture generated in the interior, keeps the grapes fresh and undecayed till the next summer."

"The most magnificent fruit is perhaps a white mulberry, found in northern Hindostan; it is from three to four inches in length, and of the thickness of the little finger; the flavor is delicious."

"A curious fact relative to Cashmerian horticulture is, that if the peach be grafted on a peach stock, the fruit is liable to be devoured by insects; for which reason the gardeners use an almond or apricot stock instead."

Note.—Cannot the gardeners of Ohio turn this hint to their own advantage?

"The Cashmerians have a novel mode of raising rice. As soon as the soil is open, and nothing to be feared from the frosts, the rice, after being well washed, is placed in earthen jars, and kept immersed in water fourteen days; meantime the soil is three times ploughed, and the clods well broken, on the tenth day after putting the rice in the jars, the ground is ploughed again for the last time—water is now let into the field, and permitted to remain for three or four days—when it is drained off—and the rice having by this time began to sprout, is sown on the swampy soil, over which oxen and buffaloes are driven to and fro, and tread down the grain to the depth of about two feet. The field is now again placed under water, and after eight or ten days, green sprouts appear. The oxen are then brought a second time, and driven about till every speck of green has disappeared. In eight or ten days the sprouts have shot up again higher than ever, and the first weeding now takes place—when the plant has attained the height of eight or ten inches, the peasants come and pass their fingers down along the stem as deeply into the muddy soil as possible, which manipulation breaks off the lateral roots; if this were to be neglected, it is said the ears would miss."

"The crop not only affords a mean of livelihood, but also a dwelling to the poor peasant, who forms a hollow stack of the sheaves, in which he lodges, till at last perhaps he is forced to dispose of his warm abode from over his head, to provide himself with winter food."

Note.—How much more easy and comfortable the manner of raising wheat and Indian corn in Ohio, than this resorted to by the painstaking Cashmerians.

"Tobacco was first introduced into the valley in the seventeenth century—nevertheless, the inhabitants prefer to it another plant named Bang." "This is a species of hemp, growing in prodigious quantities in waste and arid spots. The blossoms are dried and smoked like tobacco. It produces the same effect as opium, without its soporific and deleterious influence on the health. Like opium smokers, those who smoke Bang, say, that after a whif or two, every bad feeling vanishes, and they are the happiest mortals in existence. The seeds yield oil for the table, the leaves a cooling beverage. From the fibres tow is made, which serves for ropes and nets, and the remainder is consumed as fuel."

"The Sinbara (trapa bicornis) or water chesnut, is of such immeasurable benefit as a food for the poor, that the Brahmins say it

was transplanted into the valley by the wife of the god Vishnu."

"The atar of Roses is made here—500 pounds of roses yield only one ounce of atar. It is hard as rosin, with a most delicious odour of fresh roses, and is totally different from the Persian oil of roses, known in Europe. It is not an article of commerce."

S. P. H.

Marietta, Ohio, Dec. 1841.

For the Farmer and Gardener.

Swine:

Remarks on the origin, history, and relative merits, etc., of some distinguished breeds.

[*Concluded.*]

The importance of ascertaining as far as possible, the way in which superior kinds of swine have been produced—to exhibit their comparative value, as known by their respective weights, at a given age, &c., for the purpose of guiding us in future attempts at improvement—and also of furnishing data by which we may be able to see what progress we really make in the scale of improvement, will, I trust, be deemed a sufficient apology for extending these remarks a little further, although they have already occupied considerable space.

I have already alluded to the Mackay breed, of which we see frequent mention made in the eastern agricultural journals. I do not know why Capt. Mackay, the *founder* of this breed, has never given to the public a full written account of their origin. Having, however, formerly had the pleasure of his acquaintance—having several times purchased pigs of him—and being, I believe, one of the first by whom the breed became largely disseminated—and having more than once had from him, orally, the particulars of their origin, I think I can give the most important facts in relation to the matter.

Captain Mackay was formerly a seafaring man, and as commander of different vessels, was led to visit many parts of the world. He owned (and I think yet owns) a beautiful farm and country seat, where some of his family resided, at Weston, fourteen miles from Boston. Having always a strong inclination for rural pursuits, he was in the constant habit of procuring choice animals, particularly swine, from different parts of the globe, and taking them home to his farm. In this way he at length congregated there, various races and breeds from Europe, Asia, Africa, and even South America. After he left the seas, and devoted his attention more particularly to his farm, he resolved on combining, as far as practicable, in a new breed produced by the intermixture of the various races, the most desirable qualities of all. Results have shown how far he succeeded. After several years' experiments, he began to exhibit what he called his own breed, at the Massachusetts State Agricultural Society's shows at Brighton, and at the Middlesex county Agricultural Society's shows at Concord, and finally, for several years succeeded in carrying a majority of the premiums on swine, offered by these societies. Six or seven years since, having engaged largely in other enterprises, he gave up the breeding of swine, and sold out his stock.

The breed of hogs which originated with Capt. Mackay, and to which his name was given, was in some respects unrivalled by any other I ever knew. They would attain a greater weight at eighteen or twenty months old, than any other breed with which I have ever had an acquaintance. Six hundred pounds each, (dressed,) at the age spoken of, was not rare. And what was remarkable, they were always fat—fit to kill at any age, and were light in the bone and offal. Elias Phinney, Esq. of Lexington, Mass., at this time a noted breeder of Berkshire and other swine, in a communication published in the New England Farmer, in 1839, thus speaks of the Mackay breed: "In all the essential properties, such as early maturity, fineness of bone, and lightness of offal, they greatly exceeded the Berkshire breed."

What were the original races that contributed most to the excellence of the breed under consideration, I cannot positively tell, but from what Capt M. told me of his practice, I am inclined to think, that some of the Asiatic varieties, one of which was probably what is called the white China, are entitled to much credit.

Hogs, called the *Byfield breed*, are frequently met with in this part of the country, and they are also common in other parts. Although the variety of this breed is of a character somewhat *traditional*, I will venture to give it according to the best information to be had.

Several years ago, (say thirty,) a vessel belonging to Newburyport, Mass., touched at some point on the western coast of Africa, and took in provisions for her homeward voyage, and among other articles took some pigs. One of these pigs, a sow, for some reason was not killed by the crew, but carried to Newburyport, and given, as it is said, to a poor woman. The sow proved very thrifty, and after some time produced young. They appeared very different from any swine which had been before known in the country—had an uncommon aptitude to fatten, &c. The stock soon became much sought after; under the name of *Newbury Whites*—from the name of the place where they were had, and their color, which was white. Gorham Parsons, Esq., who owned a noted farm in Byfield, called the Byfield farm, near Newburyport, got this stock, and from him it was still more widely scattered, under the name of the Byfield breed. I have seen an account of Mr. P. having sent a boar of this breed as a present to some person in the Western Re-

serve in this State, and it is probable, that from this boar sprang much of the stock called Byfield, now in the western country. My father purchased stock of this breed when it first came into notice in Massachusetts. They were short bodied, small boned, thin skinned, thin haired, and the hair on the back growing in the form of curls—there being sometimes three or four of these curls along the back. Their flesh was too soft, which was considered a great objection. They were very helpless, bad breeders, and had not sufficient vigor of constitution; but were very easily fattened, and sometimes, by crosses, effected very great improvement. Many of the hogs under this name, to be met with here, bear very little resemblance to the original stock, and have not, probably, a thirty-second part of that blood in them. In others again, a resemblance can be distinctly traced.

Mr. Parsons, being a wealthy and spirited gentleman, spared no pains in getting on to his farm all the finest kinds of swine, as well as other animals, that could be had; and hence it happened, that after a time, hogs of quite different character were bought at Byfield, and were called the Byfield breed.

The black Sussex and the black Essex are said to be the same or very similar breeds. It is thought by some that they are one of the indigenous races of Great Britain. They have latterly attained a great degree of improvement; which it is said, (at least so far as the Sussex are concerned,) has not been effected by any admixture of other races; but by proper selection and breeding among themselves—following the same course that has brought the South Down sheep to such a high pitch of perfection.

In 1839, Mr. Henry Parsons, an intelligent Englishman, imported to Massillon, in this State, (near which place he had purchased a farm,) a boar and two sows of the Black Sussex breed, and two sows half Berkshire and half Sussex; together with as fine a lot of New Leicester or Bakewell sheep, as I ever saw. I saw this stock a few months after it was imported. The Sussex sows had each eight pigs, which had all been engaged at $50 the pair. I saw at once that they possessed uncommon points. There was about them a finish, almost a *polish;* they had a cleanness and beauty of head and limb—a fullness and liveliness of eye—and altogether a show of "*blood*," as breeders say, that I had never seen equalled. Their *uniformity* was also remarkable—indicating that their character was *fixed*. The three old ones, (all as I was told, of different litters,) and the sixteen pigs, were about as much alike as were ever the same number of *beans*. They were light in the belly, broad and deep in the chest, wide in the rib and loin, with strong, well coupled, arched backs. They were not large; but from their aptitude to fatten, exact proportions and strong frames, they were calculated to accumulate an almost incredible weight in proportion to the bone. It is said that the flesh of this breed is more highly esteemed in England on account of its flavor and qualities than that of other breeds. The appearance of the animal certainly indicates the very best quality of meat.

Some months since, Mr. Isaac Dillon and myself purchased from Mr. Parsons, a boar and sow of this breed. They are both now in possession of Mr. Dillon. The boar is a good specimen of Mr. Parsons' importation. Some experiments which have been made, show that this Sussex stock is eminently calculated to cross with some of the Berkshires. I am informed that a young boar of this cross has been lately sold at $100.

Hogs known as *Chinese* embrace many varieties. Cully enumerates no less than seven varieties in this class, known in Great Britain. Three or four different breeds, at least, have been known in this country. Of the smaller class, some are white, with bellies almost dragging the ground—scarcely any muscle—soft, blubbery flesh—and heads more like a *bat* than a common hog. Others are spotted, black and white; and others, resembling the Siamese, are clear black. The latter are much more trim and neat in their appearance. There is one or more, *large* varieties. I once saw a boar, imported in a ship from Canton, that was more than twice the size of any other Chinese hog I ever saw. He was nearly white, with a short, broad head, short legs, wide chest and long belly. In conclusion, let me say to farmers, if you would improve your stock, study the *science* of breeding, if you wish to purchase breeding animals, look around you, be not in haste; but ascertain as well as you can who has the *best*. See whose stock has the longest head, the most *uniform* excellence; for this establishes the character of the breed better than any thing else. And when you find all things are *right* an *extra dollar* need not be *grudged* to secure what you want.

For the Farmer and Gardener.

Causes which retard the introduction of fine Fruit.

Mr. Affleck:—Among the various causes which retard the introduction of fine fruit into the newer parts of the western States, there are none which I consider so inexcusable as ignorance. I would, therefore, invite the attention of your young readers to a proper examination of the facilities for such introduction, with which God, in his infinite goodness, has seen fit to surround us.

For a general rule, we are all fond of fine fruit, and when we become located, are fond of cultivating, and having it produced upon our premises; and how

often do opportunities present themselves to gentlemen, when, with little expense, of time, or trouble, they might procure cions, of choice varieties, and transport them to their domicils, for the purpose of propagation—and yet those opportunities are neglected, under the impression that it is not the proper season—or that they have not the proper stocks in which to insert the cions after they have so transplanted them.

With regard to the first supposed objection as to the time of cutting cions, I would observe—*Cions may be cut at any time in the year.* If cut during that part of the summer when the bark parts easily from the stock, then the desired variety may be propagated by budding, even though the bark should have become fixed upon the cion; in which case the bud may be inserted with the wood attached. If not cut until after the bark has become fixed to the wood, by sticking the end of the cion in the ground, in a suitable situation, it will keep well until the next spring, when it may be grafted—or by putting a foot or so under ground, in a dry place, cions may be kept more than one year, and grow well when properly set.

People often neglect to take cions when opportunities offer, under the impression that, as they live in a new part of the country, it would be very difficult to obtain stocks in which to insert them. To the correction of this error, I would particularly invite the attention of all the lovers of fine fruit. There are more than fifty species of plants, not to mention their endless varieties, into which the apple, the pear, and the quince, may be budded, or grafted—and there are more than thirty separate species of plants, with their countless varieties, into which the peach, the apricot, the nectarine, the plum, and the cherry, may be budded or grafted.

To attempt to describe each of these plants separate, would fill a space beyond that allowed to a common communication, I will, therefore, attempt such general directions, as will enable new beginners to select suitable stock for such cions as they may have collected.

In describing, I will refer both to the natural and artificial arrangements of those plants, so that a person acquainted with either system may readily recognize them.

All those plants included in the natural arrangement of plants, in the first grand division, Vasculares, 1st Class. 60th order, and 8th tribe or family, denominated *Pomacea*, (from the Latin *Pomum*, meaning the substance of apples and similar fruits) *may be propagated upon each other.* So with the division, class, and order, and the 2d tribe, denominated *Amygdalinæ*, including the peach, apricot, plum, and cherry, which may all be propagated upon each other.

Those who have not a botanical work, with the natural arrangement of plants, will find those contained in the tribe *Pomacea*, included in the 22d class of the Linnean or artificial system, *Icosandria*, and 2d order Di-peutagyna, which includes plants having from two to five stamens inserted into the calyx of the flower—and the tribe *Pomacea*, includes the plants found in the following genus, viz: *Mespilus*, or Medlar; *Cratægus*, or Hawthorn; *Pyrus*, or Pear, (including the apple, Siberian crab, American crab, mountain ash, service tree, bastard quince, and others, in all more than twenty species) the *Cydonia*, or quince; *Photina*, or smooth-leaved thorn; *Raphiolepis*, or Indian thorn; *Eriobotrya*, or Loquat; *Amelanchier*, a native of America, and *Coleniaster*, a native of Europe, some of which may be found growing wild in every part of our country, and with little trouble, stocks may be procured for setting any quantity of cions.

I would not be understood as representing that any of the above-enumerated species will grow equally well upon all the others, as upon their own stocks—on the contrary, I say they will not—but they will all *take* upon each other. In some instances, as the pear upon the quince or apple, the cion the first year will often make as fine shoots as upon its own stock, but after that the annual shoots are comparatively short—the cion appearing rather to draw its support from the stock than to unite with it—even this circumstance is taken advantage of by the Nurseryman, for producing dwarf trees, and we often see pear trees grafted upon quince stocks, loaded with fruit when not more than three or four feet high. For this purpose, they are grafted at the ground, and the cions are not allowed to send out roots above where they were inserted, as in that case the tree would resume its natural growth.

It is a theory maintained by many, that the stock has an influence upon the quality of fruit produced by the cion. If so, what a field is here opened for horticultural experiments. We should like to

hear from any one engaged in such experiments.

Yours, respectfully,
N. GOODSELL.

Rochester, Oct. 13, 1841.

We have received the following Circular from Columbus, and knowing the interest that is felt on the subject by many of our neighbors, concluded that we could not do better than give publicity to the same through our columns. That silk will shortly form one of the most important branches of Western manufacture, we have no doubt, and shall use our best endeavors to give the Committee such information as our means will afford. With this view we call upon all our friends, interested in this particular branch of manufacture, to furnish us with such particulars as they may individually possess; the whole of which, brought together will, we have no doubt, form some important data for legislative action.

COLUMBUS, Dec. 22, 1841.

DEAR SIR—A Committee has been appointed in the House of Representatives of the Ohio Legislature, to take into consideration the subject of legislative encouragement to the culture of Silk.

In order to carry out the object of their appointment, the Committee desire to hear from those interested in the subject, what is now doing in the culture of Silk in this State.

You will much oblige the Committee by communicating to them all that you can ascertain, of the number of worms fed—the amount of cocoons produced—and the quantity of silk manufactured, in its different forms, in your county, the past year. Also, as to the success or failure of the crop the summer past. If in any measure a failure, give the supposed cause, and any suggestions you may be willing to make, as to the remedy; and also, *any other facts and suggestions* connected with the Silk culture, that you are willing to communicate.

If circumstances should render it inconvenient for you to give it your personal attention, please hand this, or communicate its contents, to some person interested in the cause, who will give the information desired.

It is desirable that the information be communicated at as early a day as possible.

Please address the subscriber at Columbus. A. A. BLISS,
For the Committee.

The Manure Heap.

Every farmer should improve all opportunities for increasing the quantity of manure from his stables, and for preventing their deterioration from excessive heat as well as from too great exposure to the air. Stable manures will heat and burn if they were thrown loose into a pile, unless other matter is mixed with them—and peat or pond muck is so cold that it is worth but little when it is first dug. A proper mixture, therefore of these two articles operates favorably on both, and the latter part of the summer is the most favorable season to procure the cold ingredient from the swamps. The mixture may be made as fast as the stable manure is ready to be hauled from the barn.

It is not necessary that a union of those two ingredients should take place near the stable. If the peat muck lies half a mile from the barn and close by the field which is to be manured, the labor of carrying the muck to the barn may be saved, and the compost heap may be formed by carrying the stable manure to the field, and mixing it on the spot.

In this way a vast amount of labor may be spared, since we save the carting of the muck to the barn and then from the barn. One load of good stable manure will be sufficient for three or four loads of muck.

Peat and muck from swamps are much improved by lying in heaps after they are dug up, and we should never spread them on the field until they have been exposed for one winter to be acted on by the frosts; and the sooner they are dug in the season the better will be the compost that is made from them to be used in the following spring.

Dry seasons are better than wet ones to procure this matter from the low lands, and the first opportunity should be improved after the hay and the grain harvests are over to procure large quantities of it; and if these are not all used in the following season they will not be injured by lying over to another.—*Boston Cultivator.*

Editorial.

We beg to acknowledge "A letter about Hogs," from our esteemed friend, Solon Robinson.

Also, the communication of Mr. J. Dille, of Newark. We believe that the person that can so well tell us what is necessary to add stability and interest to our work, can likewise assist us in our endeavors, and we shall be glad to add his name to our list of correspondents.

Agreeable to our arrangements spoken of in our opening address to our third volume, our Mr. Affleck is making an extensive tour through Mississippi, Louisiana, &c. We have, at present, no communication from him, though we anticipate, for our next number, much valuable information on the state of the farming operations of our Southern friends.

We have received from M. D. Phillips, Esq., of Hinds county, Miss., a splendid pair of Bremen Geese. There is an old saying "that some people's geese are all swans." If we were to state the real size of these birds, we think our neighbors would imagine that we had fallen into the common error, and put it down at once, as a fact, that it was swans we were talking of. We have but little room in the present No. to extend our observations on the subject, though we cannot help remarking that an improvement of this description of stock is as well worthy the attention of the farmer as that of the Berkshire or the Durham. The reflection makes us refer to an observation of Dr. Kirtland's, in the 107th page of our second volume, when speaking on the same subject, he says: Only think of it, what a display one of these geese, weighing 21 lbs., would make on a Christmas dinner-table! Our common 6 or 8 pounders would soon be banished, as worthless dwarfs, &c.

We have received from Mr. Francis Devol, of Union Township, a box of apples, which he calls the long Pearmain, and gathered from a tree which Mr. D. thinks the largest of its kind in the county, the following being its dimensions: Girth of the trunk one foot above the ground, and above the union of the scion with the natural stock, ten feet and one inch—about four feet from the ground, and just below the first limb, its girth is 9 feet 3 inches, its branches covering a space of 52 by 53 feet. The trunk is, to all appearance, healthy and growing. The seedling was grown and grafted by Paul Fearing, Esq., (now deceased) of Marietta, and was planted out where it now stands, on the Muskingum bottom, 5 miles from the mouth, in the spring of 1796, by Jonathan Devol.

To our Subscribers.

We are induced to call upon the friends of the Farmer and Gardener, to interest themselves to increase our subscription list. There is scarcely a person who takes our work, but could induce a neighbor to subscribe, which, of itself, would double our present circulation. Our attention has been particularly drawn to the notice of this fact, by the kindness of some of our friends, who have effectively exerted themselves in this way, and at whose suggestion we make the call; at the same time, we beg to assure our supporters that no exertion or expense will be spared to render our monthly number in every way worthy of their notice.

NIAGARA.

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